

REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

I. CLAIM STATUS AND AMENDMENTS

Claims 12-22 were pending in this application when last examined.

Claims 12-16 were examined on the merits and stand rejected.

Claims 17-22 were withdrawn as non-elected subject matter.

Claim 12 is amended to clarify the claimed invention. Support for this amendment can be found in the specification between page 11, line 14, and page 12, next-to-last line.

No new matter has been added.

II. CLAIM INTERPRETATION

On page 2, it is indicated that in claim 12 the language “prepared by cleavage from a single-stranded circular DNA” is not being given weight because the product-by-process step as to how the single-stranded DNA fragment was prepared is merely descriptive and not recited as an active step.

Applicants note that claim 12 is amended herein to recite “preparing a single-stranded DNA fragment having 300 to 3,000 bases by cleavage from a single-stranded circular DNA” instead of “introducing a single-stranded DNA fragment having 300 to 3,000 bases which is prepared by cleavage from a single-stranded circular DNA”.

Applicants further note that claim 12, as amended herein, defines a step of preparing a single-stranded DNA fragment and clarifies that the method claim requires the first step of preparing a single-stranded DNA fragment and the second step of introducing the DNA fragment into a cell.

II. OBVIOUSNESS REJECTION

On pages 3-8, claims 12-16 were rejected under 35 U.S.C. § 103(a) as obvious over Moriya in view of Zarling et al. Applicants respectfully traverse this rejection as applied to the amended claims.

As claim 12 is amended herein, Applicants respectfully contend that the step of “preparing a single-stranded DNA fragment by cleavage from a single-stranded circular DNA” should be given weight. The advantages of this step are described in the specification, between page 11, line 14, and page 12, next-to-last line. Zarling et al. describe “targeting polynucleotides” (DNA fragments for introduction into a cell) in paragraph [0055], but does not refer to a preparation from a single-stranded circular DNA, and the advantages thereof.

Applicants note that Moriya introduces into COS-7/COS ts2 cells a single-stranded circular phagemid DNA with or without a modified base (8-oxoG) at a predetermined site. Although Moriya observed base changes in COS-7 cells, the changes occurred in DNA replicated in the cells, i.e., the DNA that is progeny of the introduced phagemid DNA itself. In the experiment using COS ts2 cells, the neo gene was used a selection marker, and not as a target gene. Moriya explicitly teaches a single-stranded circular phagemid DNA, but he neither teaches nor suggests a single-stranded DNA fragment from the circular DNA for base conversion of a target DNA.

Since Moriya neither teaches nor suggests the use of single-stranded phagemid DNA for base conversion of a target DNA, one of skill in the art would not be motivated or have reasonable expectation of success to employ single-stranded circular DNA for preparing targeting polynucleotides as disclosed in Zarling et al.

For the above-noted reasons, Applicants respectfully submit that this rejection is untenable and should be withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

Respectfully submitted,

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